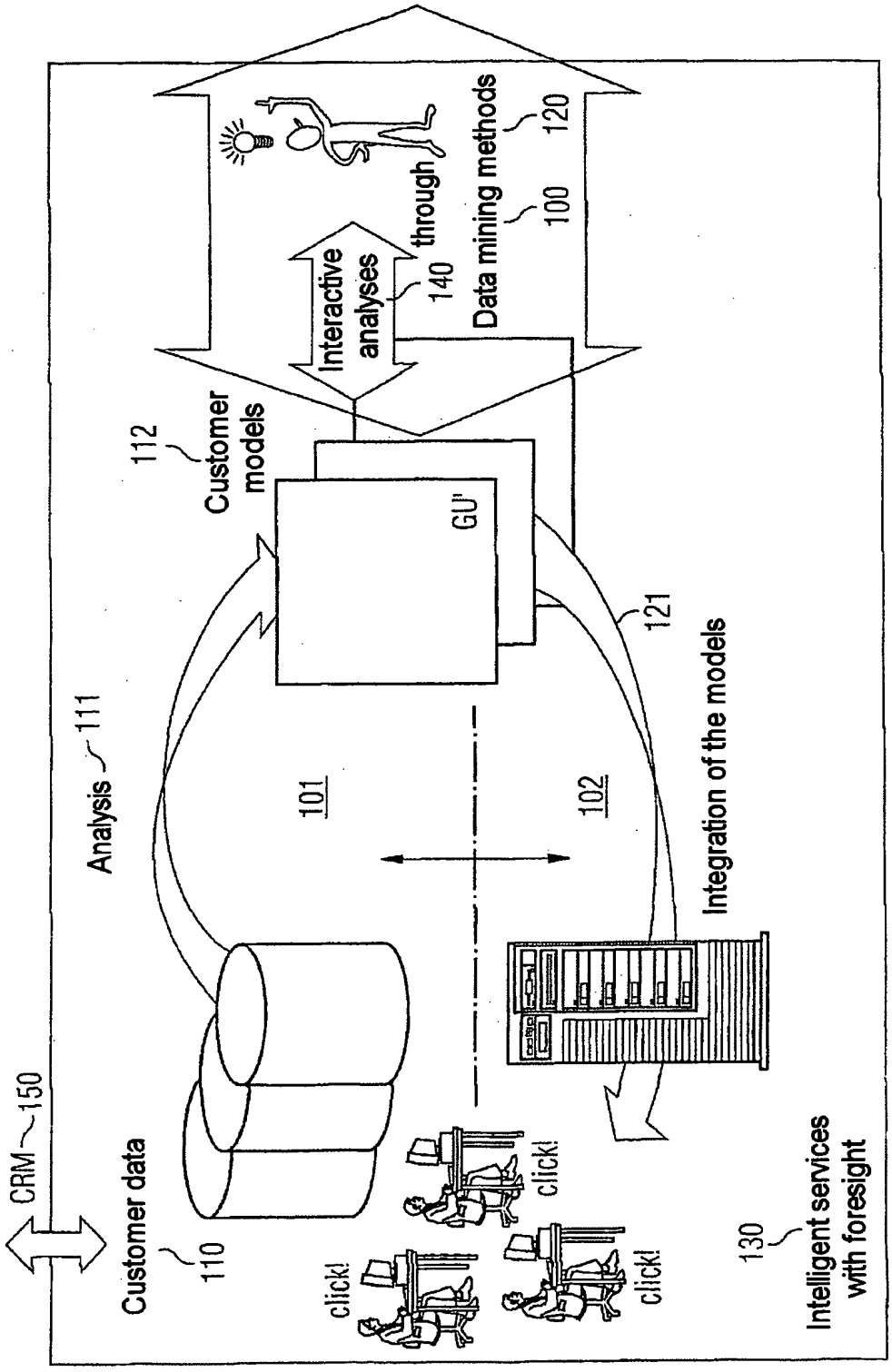

Data mining methods
120
100
Interactive analyses through
140
Customer models
112
GUI
121
Integration of the models
Analysis
111
101
102
CRM
150
Customer data
110
click!
click!
click!
130
Intelligent services with foresight

FIG 1

FIG 2A

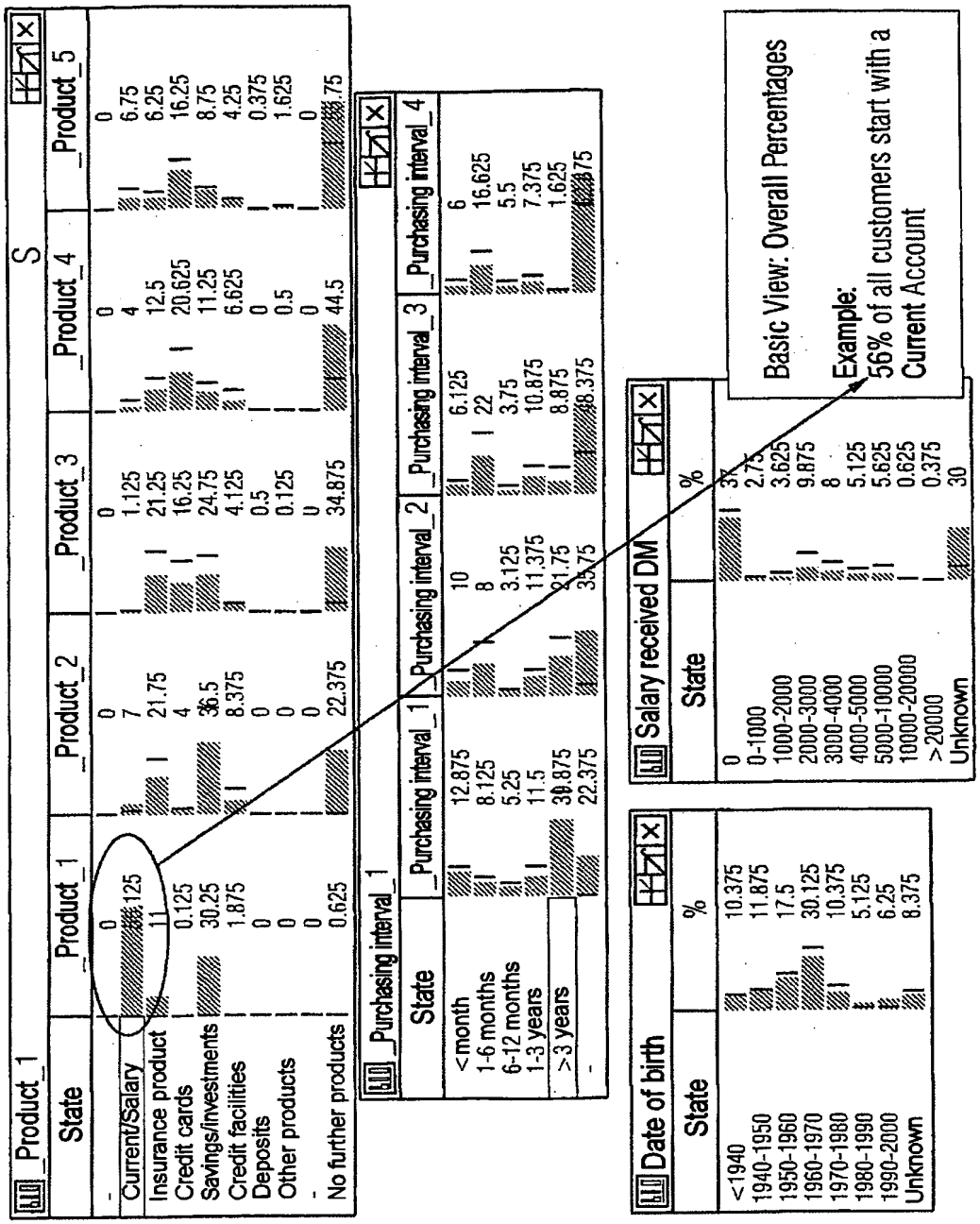

_Product_1
State
Current/Salary
Insurance product
Credit cards
Savings/investments
Credit facilities
Deposits
Other products
No further products
_Product_1
_Product_2
_Product_3
_Product_4
_Product_5
_Purchasing interval_1
_Purchasing interval_2
_Purchasing interval_3
_Purchasing interval_4
<month
1-6 months
6-12 months
1-3 years
>3 years
Date of birth
<1940
1940-1950
1950-1960
1960-1970
1970-1980
1980-1990
1990-2000
Unknown
Salary received DM
0
0-1000
1000-2000
2000-3000
3000-4000
4000-5000
5000-10000
10000-20000
>20000
Unknown
Basic View: Overall Percentages
Example:
56% of all customers start with a Current Account

FIG 2B

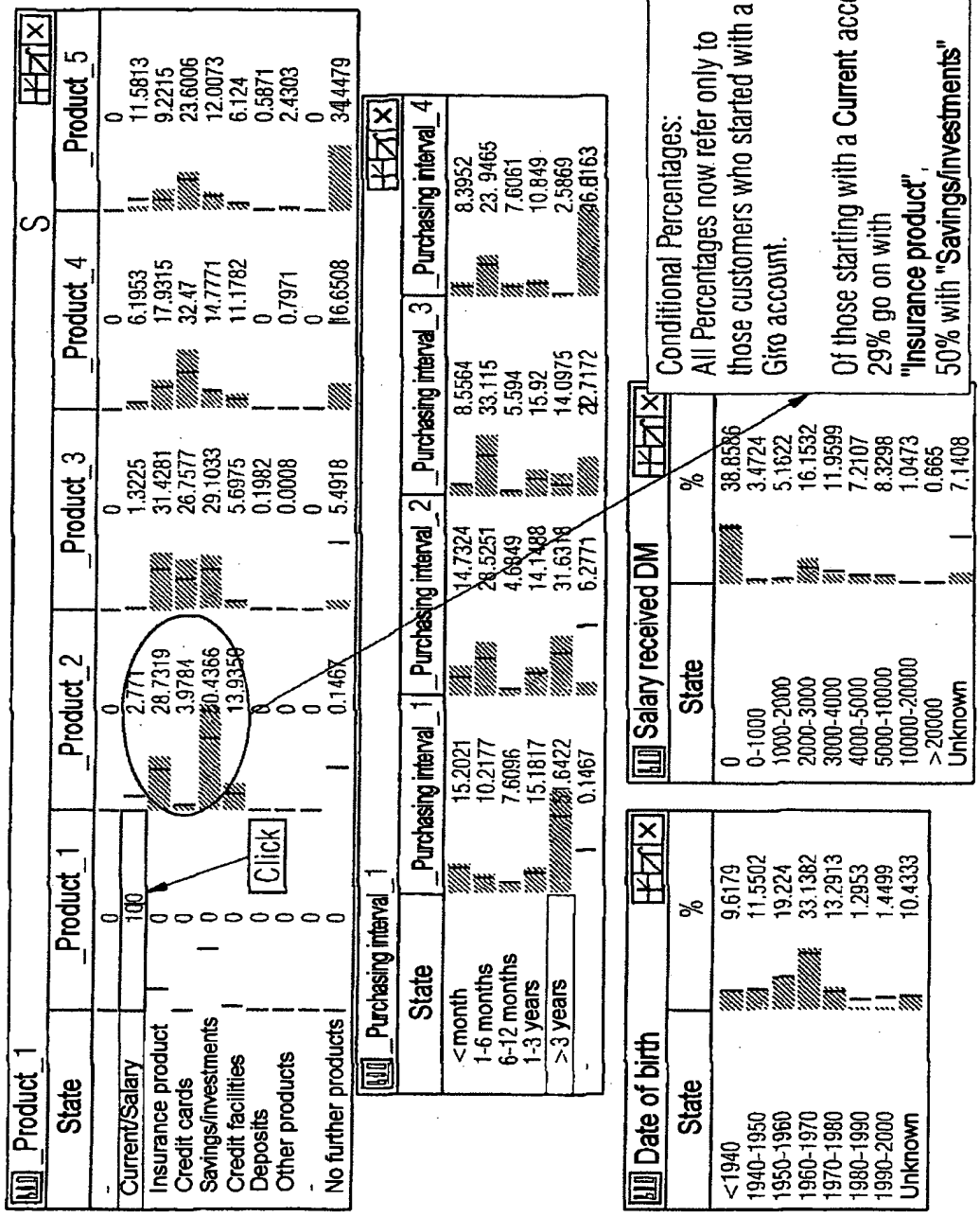

Product_1
State
Current/Salary
Insurance product
Credit cards
Savings/investments
Credit facilities
Deposits
Other products
No further products
Click
Product_1
Product_2
Product_3
Product_4
Product_5
Purchasing interval_1
Purchasing interval_2
Purchasing interval_3
Purchasing interval_4
<month
1-6 months
6-12 months
1-3 years
>3 years
Date of birth
<1940
1940-1950
1950-1960
1960-1970
1970-1980
1980-1990
1990-2000
Unknown
Salary received DM
0
0-1000
1000-2000
2000-3000
3000-4000
4000-5000
5000-10000
10000-20000
>20000
Unknown
Conditional Percentages:
All Percentages now refer only to those customers who started with a Giro account.
Of those starting with a Current account
29% go on with
"Insurance product",
50% with "Savings/investments"

FIG 2C

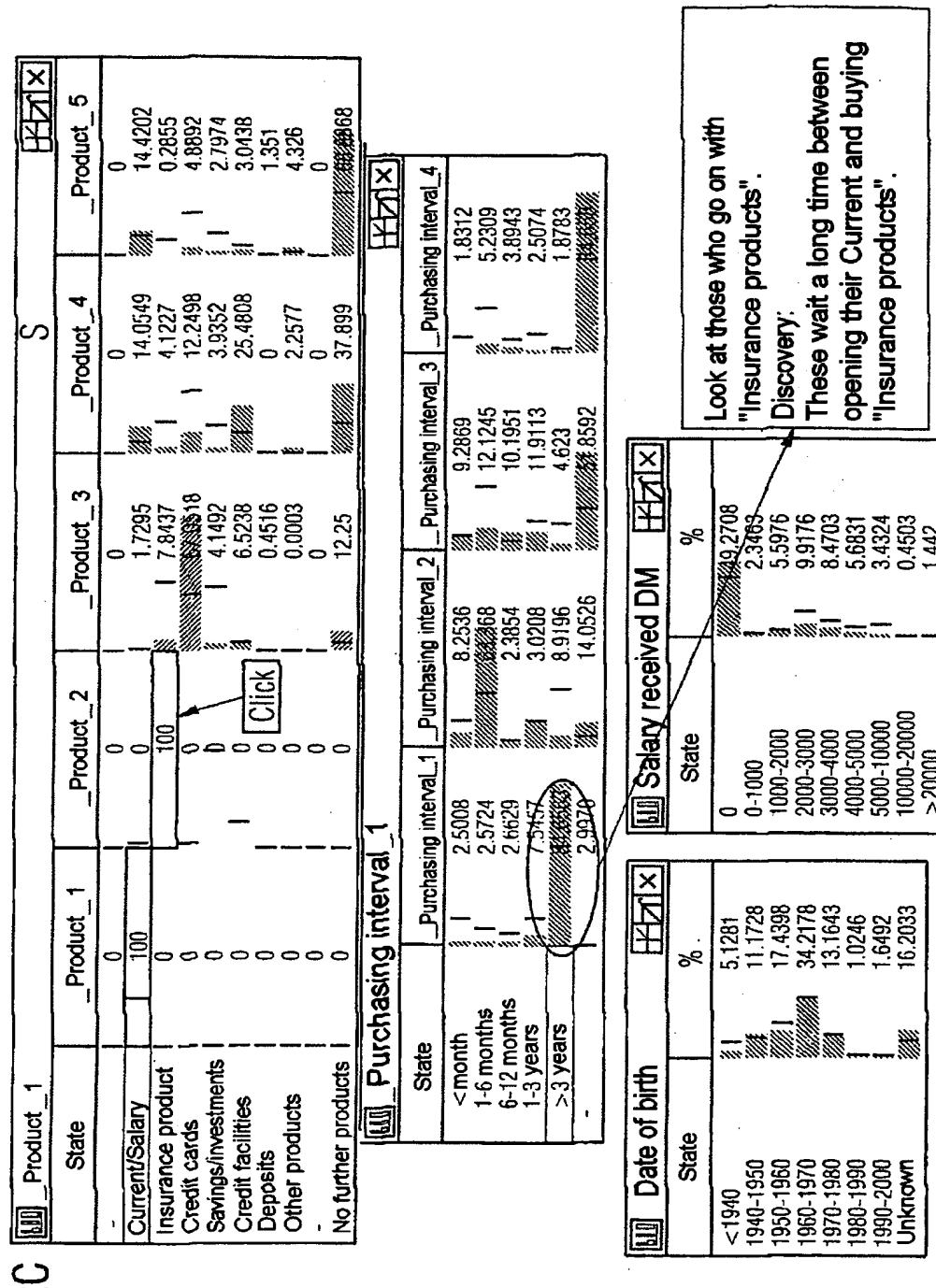

_Product_1
State
_Product_1
_Product_2
_Product_3
_Product_4
_Product_5
Current/Salary
Insurance product
Credit cards
Savings/investments
Credit facilities
Deposits
Other products
No further products
Click
S
_Purchasing interval_1
_Purchasing interval_2
_Purchasing interval_3
_Purchasing interval_4
<month
1-6 months
6-12 months
1-3 years
>3 years
Date of birth
<1940
1940-1950
1950-1960
1960-1970
1970-1980
1980-1990
1990-2000
Unknown
Salary received DM
0
0-1000
1000-2000
2000-3000
3000-4000
4000-5000
5000-10000
10000-20000
>20000
Unknown
Look at those who go on with "Insurance products".
Discovery:
These wait a long time between opening their Current and buying "Insurance products".

FIG 2D

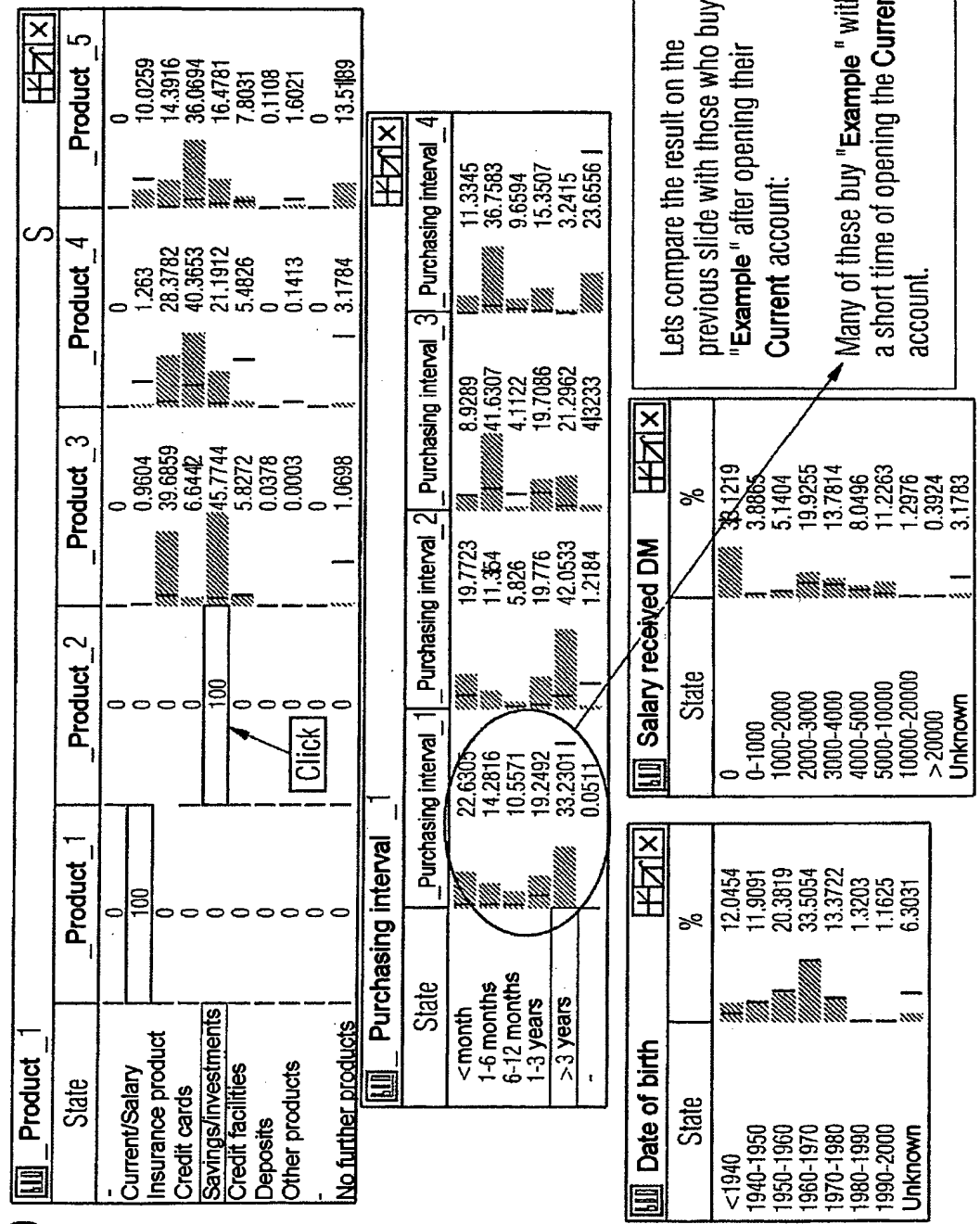

_Product_1
State
Current/Salary
Insurance product
Credit cards
Savings/investments
Credit facilities
Deposits
Other products
No further products
_Product_2
_Product_3
_Product_4
_Product_5
Click
_Purchasing interval_1
State
<month
1-6 months
6-12 months
1-3 years
>3 years
_Purchasing interval_1
_Purchasing interval_2
_Purchasing interval_3
_Purchasing interval_4
Date of birth
State
%
<1940
1940-1950
1950-1960
1960-1970
1970-1980
1980-1990
1990-2000
Unknown
Salary received DM
State
%
0
0-1000
1000-2000
2000-3000
3000-4000
4000-5000
5000-10000
10000-20000
>20000
Unknown
Lets compare the result on the previous slide with those who buy "Example" after opening their Current account:
Many of these buy "Example" within a short time of opening the Current account.

FIG 2E

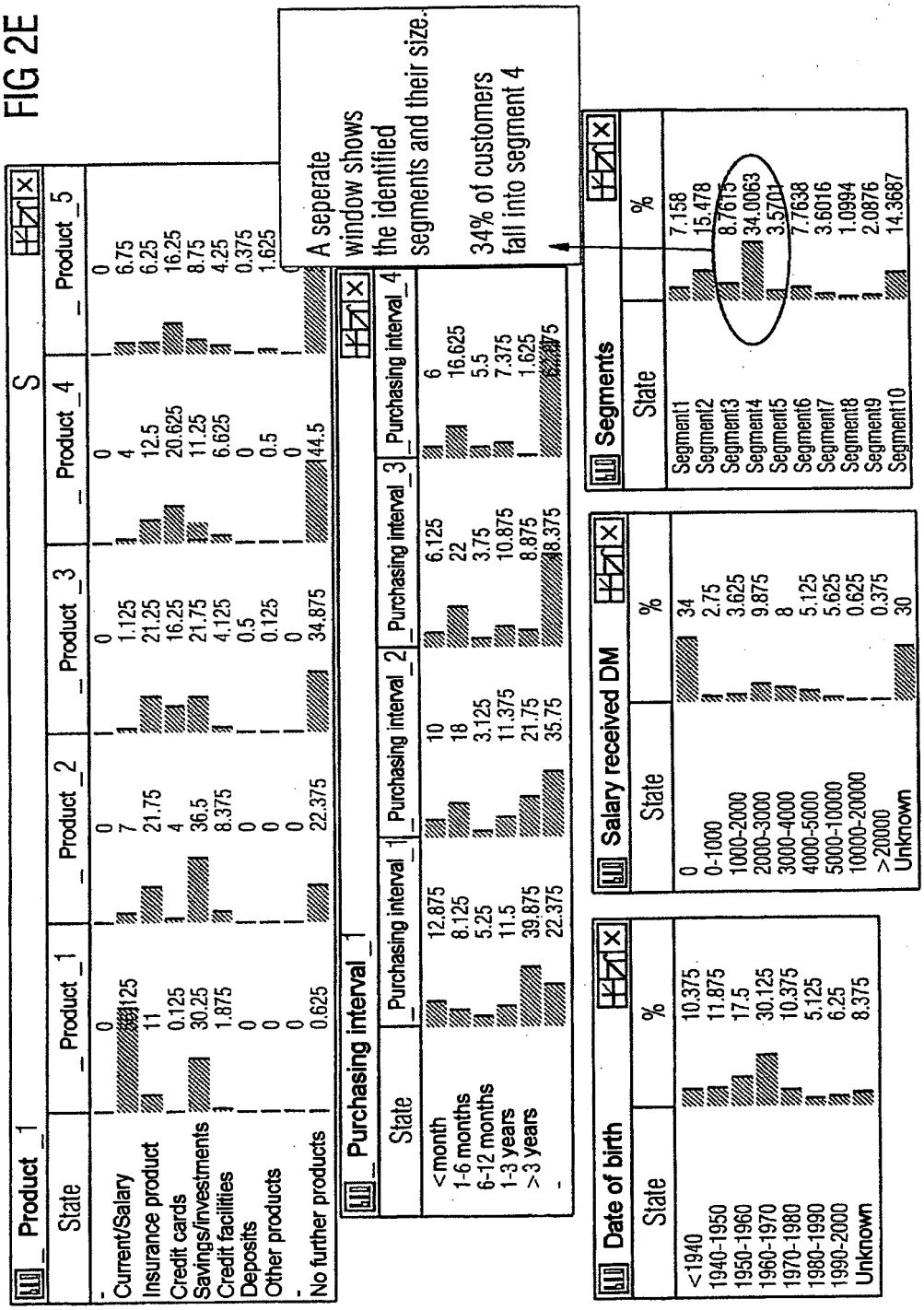

_ Product_1
State
_ Product_1
_ Product_2
_ Product_3
_ Product_4
_ Product_5
Current/Salary
Insurance product
Credit cards
Savings/investments
Credit facilities
Deposits
Other products
No further products
_ Purchasing interval_1
_ Purchasing interval_2
_ Purchasing interval_3
_ Purchasing interval_4
<month
1-6 months
6-12 months
1-3 years
>3 years
Date of birth
<1940
1940-1950
1950-1960
1960-1970
1970-1980
1980-1990
1990-2000
Unknown
Salary received DM
0
0-1000
1000-2000
2000-3000
3000-4000
4000-5000
5000-10000
10000-20000
>20000
Unknown
Segments
Segment1
Segment2
Segment3
Segment4
Segment5
Segment6
Segment7
Segment8
Segment9
Segment10
A seperate window shows the identified segments and their size.
34% of customers fall into segment 4

FIG 2F

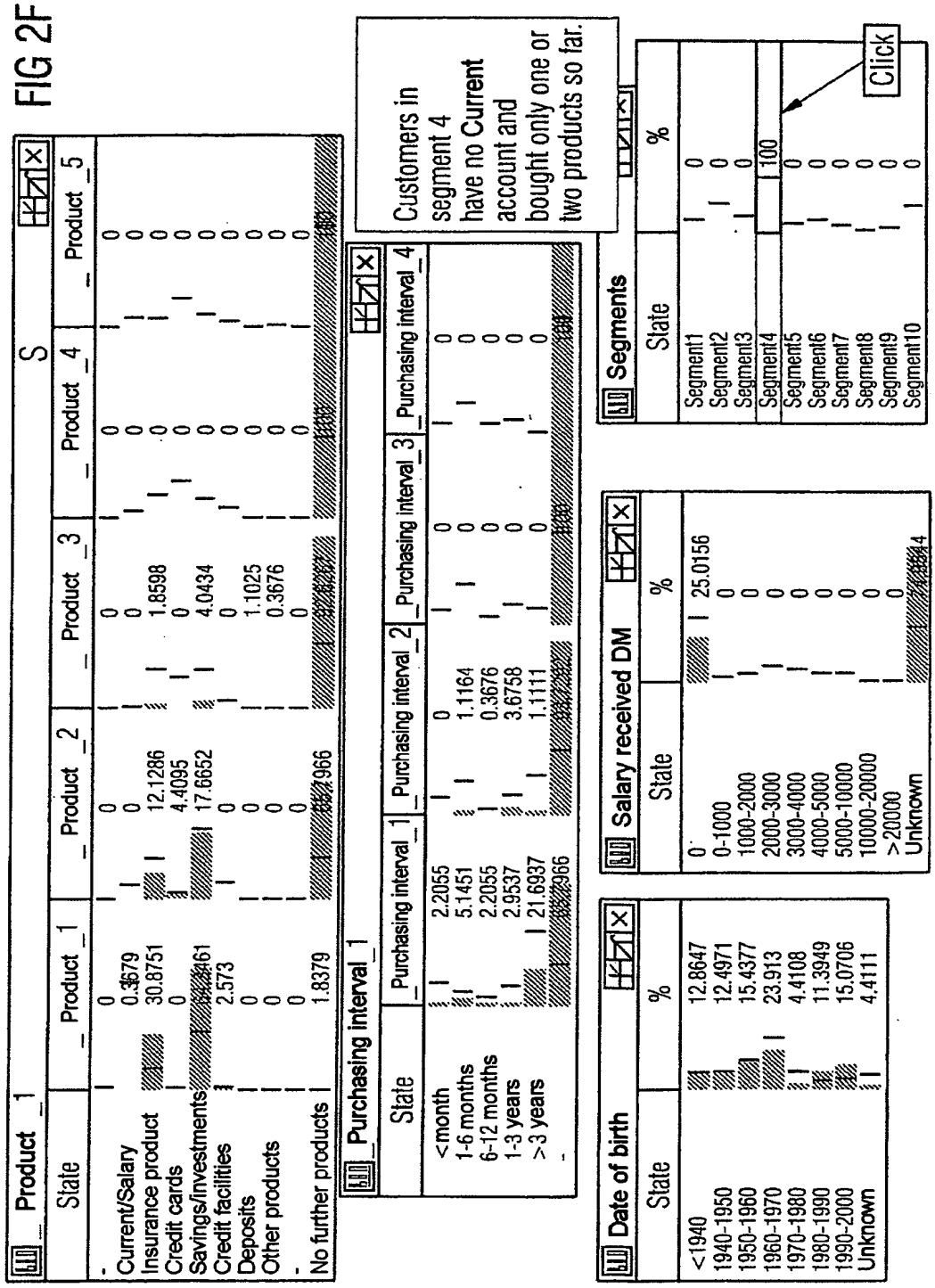
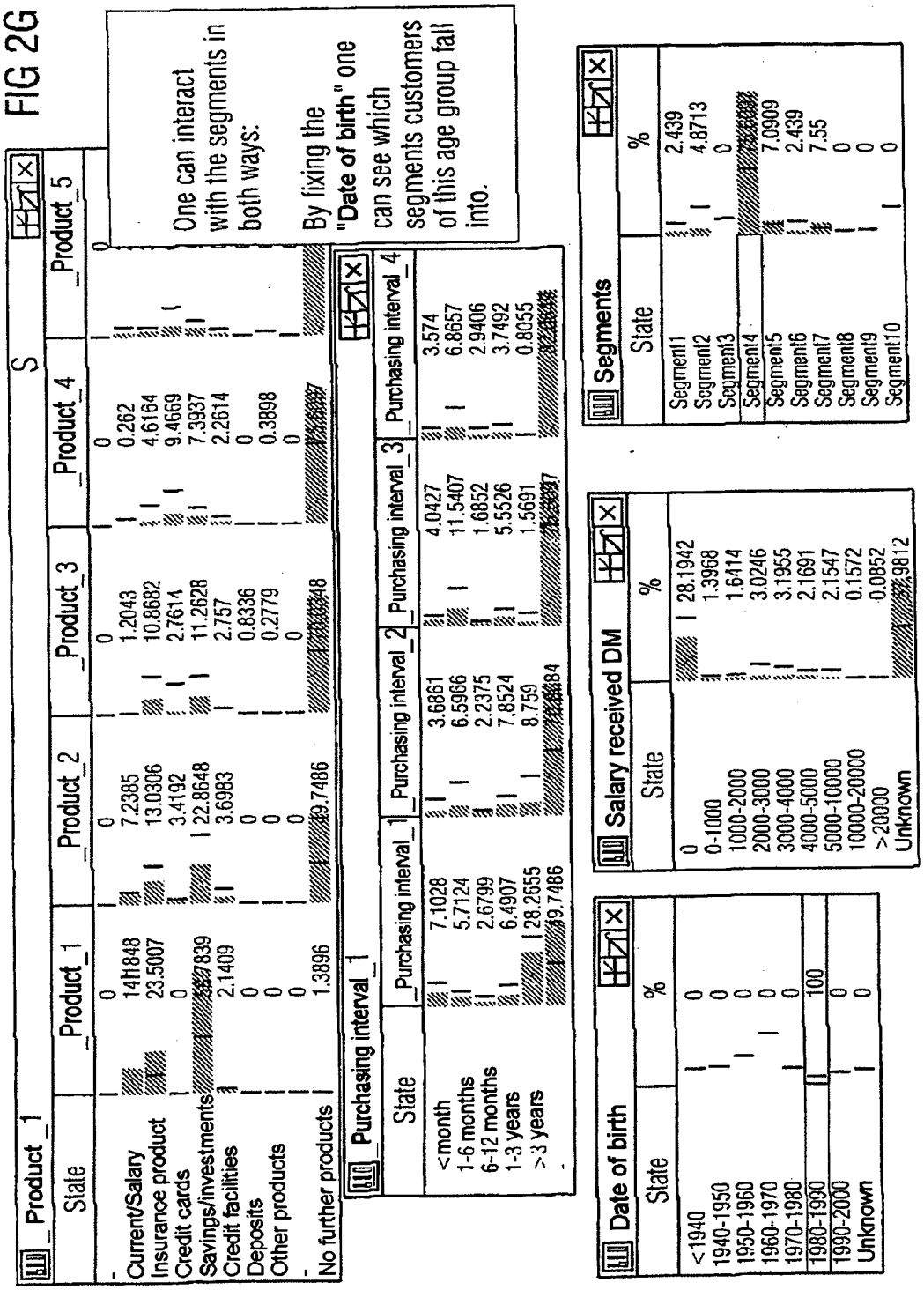

Product_1
State
Product_1
Product_2
Product_3
Product_4
Product_5
Current/Salary
Insurance product
Credit cards
Savings/investments
Credit facilities
Deposits
Other products
No further products
Purchasing interval_1
State
Purchasing interval_1
Purchasing interval_2
Purchasing interval_3
Purchasing interval_4
<month
1-6 months
6-12 months
1-3 years
>3 years
Customers in segment 4 have no Current account and bought only one or two products so far.
Date of birth
State
%
<1940
1940-1950
1950-1960
1960-1970
1970-1980
1980-1990
1990-2000
Unknown
Salary received DM
State
%
0
0-1000
1000-2000
2000-3000
3000-4000
4000-5000
5000-10000
10000-20000
>20000
Unknown
Segments
State
%
Segment1
Segment2
Segment3
Segment4
Segment5
Segment6
Segment7
Segment8
Segment9
Segment10
Click

FIG 2G


S
_Product_1
State
_Product_1
_Product_2
_Product_3
_Product_4
_Product_5
Current/Salary
Insurance product
Credit cards
Savings/investments
Credit facilities
Deposits
Other products
No further products
_Purchasing interval_1
_Purchasing interval_2
_Purchasing interval_3
_Purchasing interval_4
<month
1-6 months
6-12 months
1-3 years
>3 years
Date of birth
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1940-1950
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1960-1970
1970-1980
1980-1990
1990-2000
Unknown
Salary received DM
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0-1000
1000-2000
2000-3000
3000-4000
4000-5000
5000-10000
10000-20000
>20000
Unknown
Segments
Segment1
Segment2
Segment3
Segment4
Segment5
Segment6
Segment7
Segment8
Segment9
Segment10
One can interact with the segments in both ways:
By fixing the "Date of birth" one can see which segments customers of this age group fall into.